

Overview of How the District Manages the Lake During Drought

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Objective of the Presentation

- I. Provide background on the role of the Lake in water supply
- II. Review how the District has managed Lake based water shortages
- III. Introduce a revised method for allocating water from the Lake during a declared water shortage
- IV. Prepare for next month's Board meeting

I. Regulation of the Lake (cont'd)

- **Operation of the Lake is governed by federal water control plans**
 - **Incorporated into federal regulations**
 - **Develop and modified through a formal federal process**
 - **Public comment incorporated pursuant to the National Environmental Policy Act (NEPA) process**

I. Regulation of the Lake (cont'd)

- **Role of the District as local sponsor**
 - **Subject to and bound by federal regulations**
 - **Participates in day to day operations of Lake**
 - **May request Corps for deviations from water control plan**
 - **District given greater discretion in managing Lake for water supply**

Water Supply Issues Associated with the Proposed Regulation Schedule

- **Proposed schedule increases probability of extreme low Lake stages during drought**
 - **Increased reliance on forward pumps**
 - **Concerns regarding environmental impacts associated with the lower Lake stages**
- **District's goals to mitigate impacts of proposed schedule on water supply**
 - **Revise Lake's water shortage allocation plan**
 - **Implement temporary and permanent forward pumps**

II. Role of Lake in Water Supply

- Direct dependence

- Withdrawals directly from Lake

- Lake utilities

- Seminole tribe

- Ag/commercial/industrial

- Indirect dependence

- LEC coastal areas

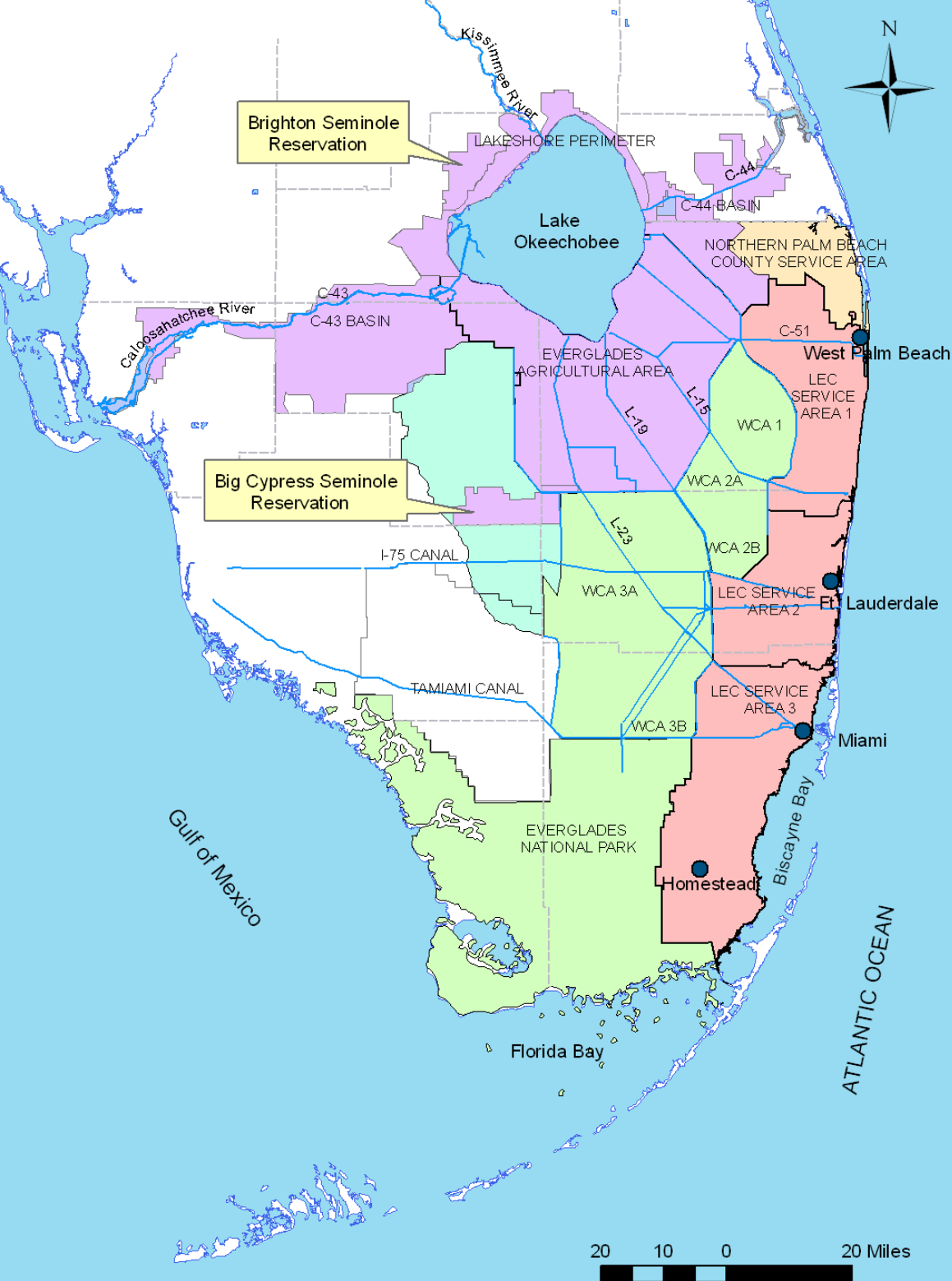
- Aquifer recharge during certain drought conditions

Lake for Water Supply: Direct Dependence

- **Agriculture: EAA, Caloosahatchee, C-44 etc.**
 - 750,000 acres under permit
 - \$4.4 Billion annual revenues
 - 63,500 jobs
- **Public water supply**
 - 5 Lake based utilities
 - 79,000 people served
- **Seminole Tribe**
 - 27,000 acres of agriculture

Lake for Water Supply: Indirect Dependence

- 50 wellfields that rely on the regional system for recharge during dry times
- Approximately 5 million people served
- 12 utilities near saltwater
- Agriculture, nursery growers, landscape demands



Location of direct and indirect users of Lake Okeechobee

III. Managing the Lake in Water Shortage

- **Regulated under District rules**
 - **40E-22, FAC**
 - **When Lake based cutbacks are triggered**
 - **40E-21, FAC**
 - **How water shortage is administered**
 - **Who cutbacks and how much**
- **Supply Side Management: The Lake water shortage allocation plan**

III. Managing Water Shortage (cont'd)

How are Cutbacks Determined

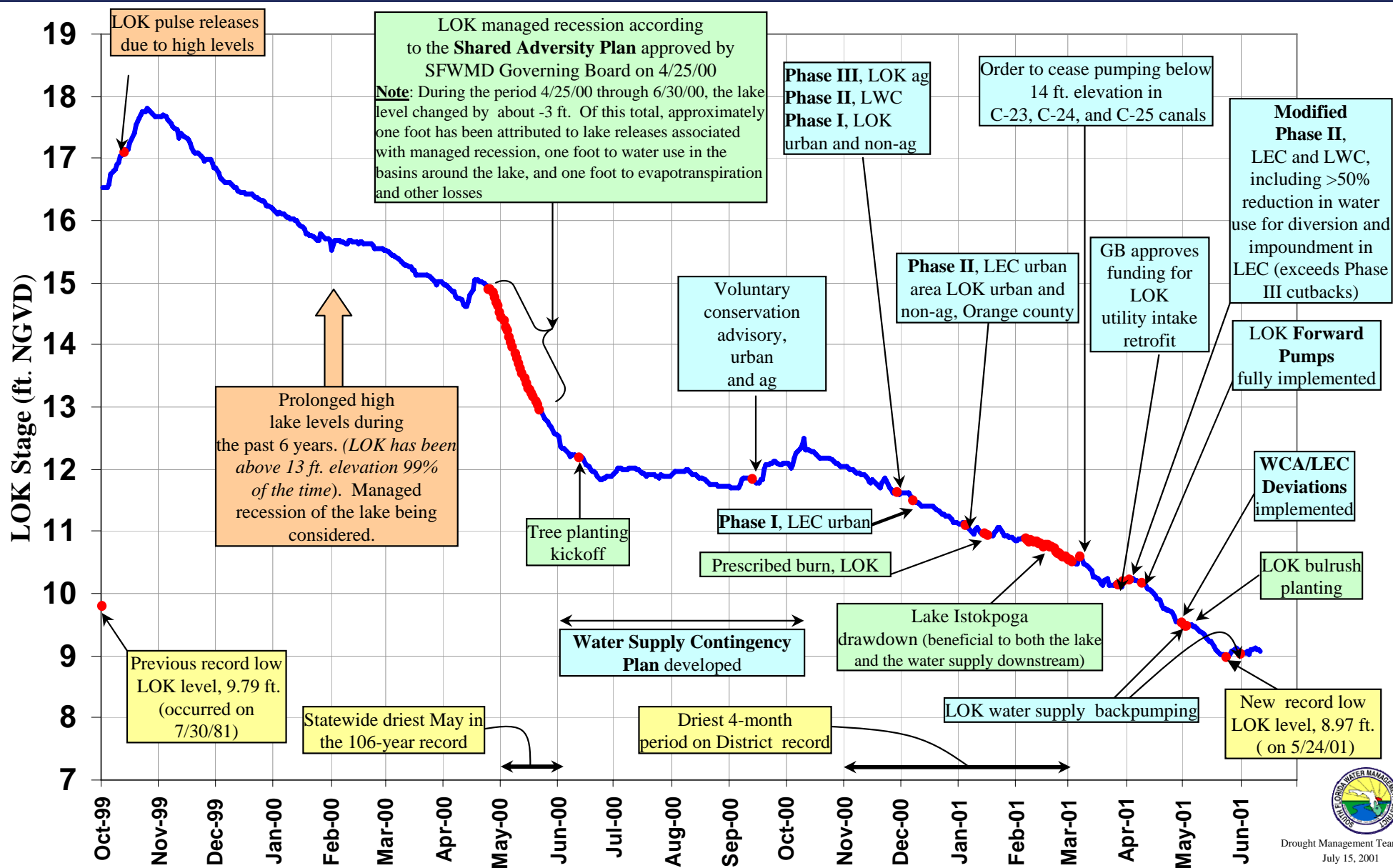
- **Governing Board declares water shortage per chapter 40E-21, FAC**
- **Water Use Permit conditions temporarily superseded by GB order**
 - **Magnitude of cutbacks tied to**
 - **Type of use**
 - **Severity of drought**
 - **Risk of duration**
- **When cutbacks are imposed in Lake Service Area, cutbacks also imposed on coast**

III. Managing Water Shortage (cont'd)

2001 Drought

- Temporary forward pumps deployed
- Initial allocations based on trying to keep the Lake above 10.5 ft
- Adjustments made to the 10.5 reference elevation as drought intensified
- Cutbacks to urban areas:
 - No Lake deliveries to urban areas
- Severe cutbacks to Lake dependant agriculture produced significant economic losses

Chronology of the current drought and water management actions



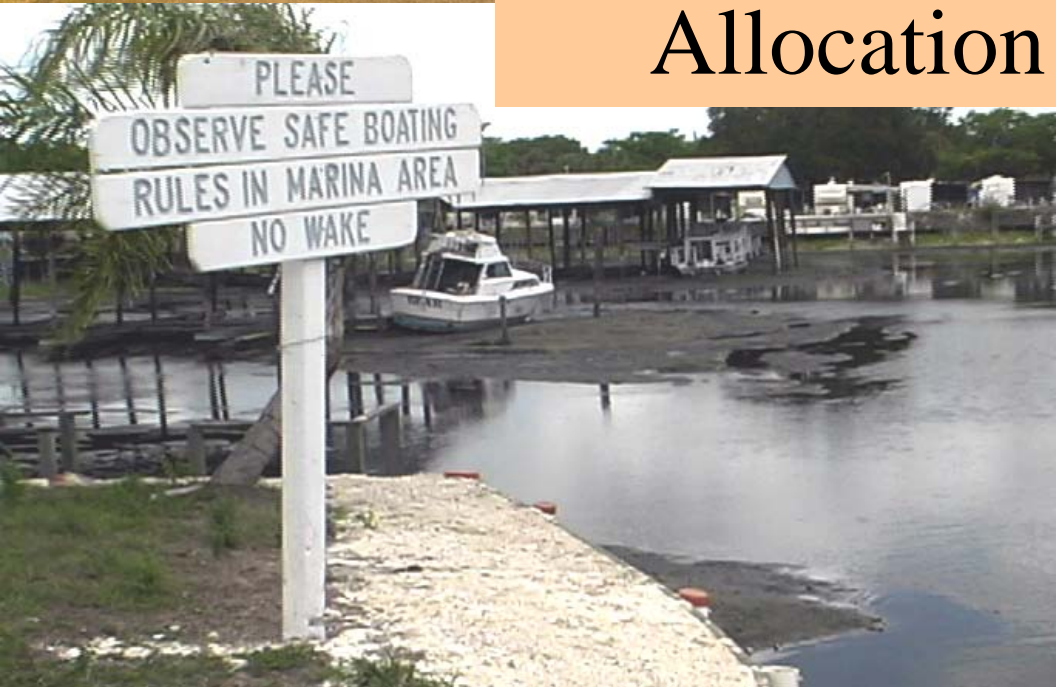
Notation:
 LEC - Lower East Coast
 LWC - Lower West Coast
 LOK - Lake Okeechobee
 WCA - Water Conservation Area

Driest 18-month period on District record

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Past and Proposed Water Shortage Allocation Methods



What's Next

- Staff to prepare Lake Water Shortage Plan criteria and submit to Corp for inclusion into their Supplemental Environmental Impact Statement
- Finalize recommendation for sizing of permanent forward pumps
- Continue to work with Corp to improve performance of proposal regulation schedule
- Comment on Corps proposed modified regulation schedule
- September Governing Board direction